

Electronic Classrooms: Design, Use, and Evaluation

Amigos Fellowship Final Report

October 2002

Submitted by

Sylvia Contreas

(Formerly at Texas A & M University, Corpus Christi)

Electronic Classrooms: Design, use, and evaluation

AMIGOS Fellowship Final Report

This statement is respectfully submitted to the AMIGOS Bibliographic Council, Inc. by Sylvia Contreras to meet the requirements of The AMIGOS Fellowship. This report includes the following components: Summary of Activities, Statement of Evaluation, and Financial Report.

Summary of Activities

The establishment of electronic classrooms for library instruction is vital in today's rapidly growing high-tech society. In planning for the technological future of library instruction, libraries must design classrooms that foster positive learning environments, develop instruction modules incorporating technology, and continually evaluate classroom design and instruction.

In preparing for the project I conducted a review of the relevant literature in the field of library and information sciences and in the field of academic classroom design. I conducted a telephone survey of several academic libraries regarding their use of electronic classrooms. Additionally, I consulted with a furniture vendor who presented several layouts to assist in the design of our electronic classroom.

The first phase in the development of the electronic classroom was to identify possible classroom designs. I conducted an extensive review of the literature available written within the last ten years. Based on the results of the literature review, I identified ideal classroom layouts, academic institutions currently utilizing such designs, and equipment and technology requirements. Additionally, design pitfalls were identified as well as potential problems associated with remodeling an existing facility.

The second phase consisted of developing a telephone questionnaire (Appendix 1) based on the literature reviewed. This questionnaire was comprised of several key questions that could easily be answered over the telephone. I identified several institutions that designed successful classrooms. These institutions had classrooms which were comparable to our room dimensions and estimated remodeling budget. Additionally, several leaders in electronic classroom design were contacted and asked to answer the questionnaire. Upon completion of the telephone survey, several designs and leaders were identified and slated for a visit. Due to budgetary travel constraints I decided to visit several Texas academic institutions having recently implemented electronic classrooms.

During the third phase I contacted a local vendor of classroom furniture and discussed possible layouts for our existing classroom. We discussed the pros and cons of various layouts (Appendix 2-5) identified during the literature review and survey. Two possible layouts were designed and presented to the libraries' instruction and technology staff. A final design was selected, a financial proposal was developed and submitted to the Library Director when funding was secured, and remodeling was completed Fall of 1998.

Statement of Evaluation

The AMIGOS Fellowship supported my profession development growth by providing the opportunity to develop an ergonomically designed electronic classroom at Texas A&M University- Corpus Christi. The procedures used in the development of the electronic classroom will provide the library profession with a foundation for future projects. Additionally, the project was an excellent opportunity to become familiar with the proposal writing process. The hands-on experience that I gained from learning to collaborate with colleagues, vendors, electricians and other facilities managers was invaluable.

Library Instruction: Facilities Survey

Library: _____

Contact: _____

Phone: _____

Projection Equipment: (ex: Proxima projector, LCD panel, etc.)

Software:(Windows (what version), Netscape, SPIRS, etc)

Internet Access: Yes No

Networked: Yes No

Instructor's Station:

Type: (ex: 486, Pentium)

Controls student workstations?

Microphone:?

Furniture: (standing potium or sitting)

Student Stations:

Number:

Type:

Furniture:

Other equipment:

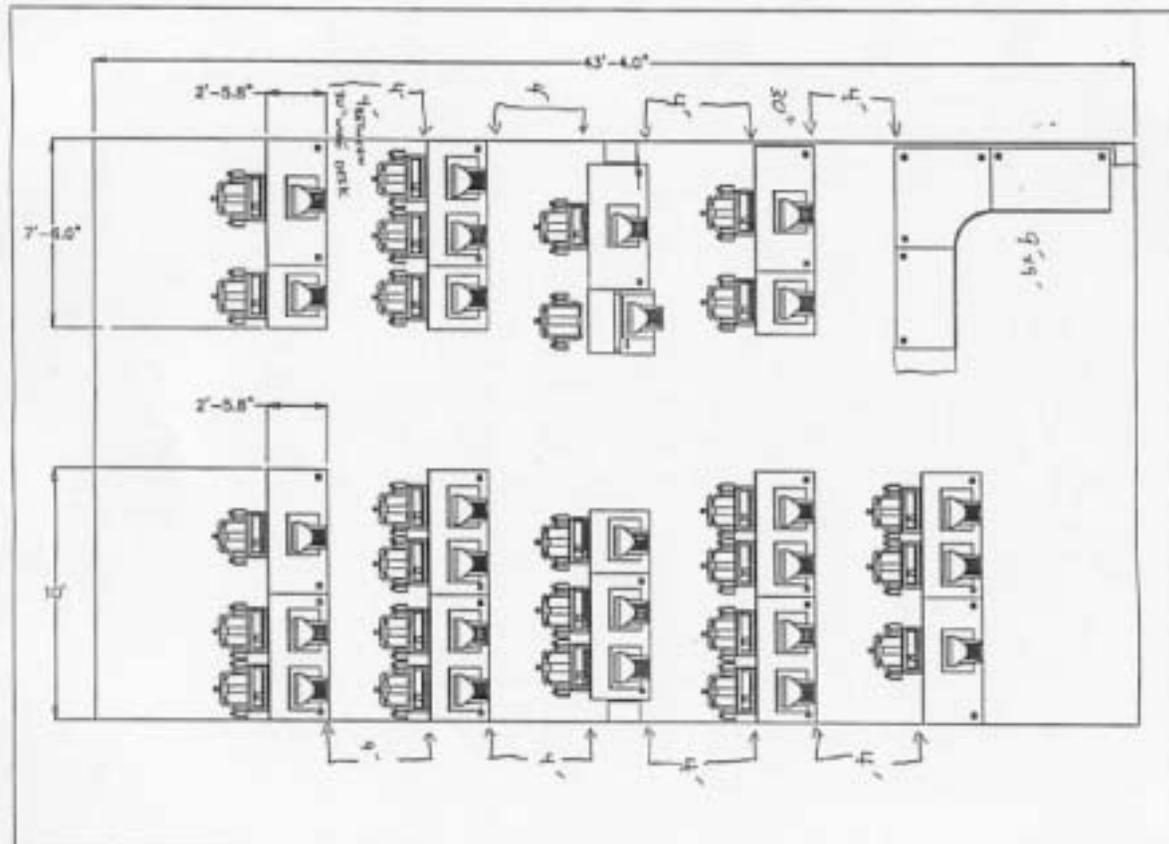
Layout: (please provide a floor plan or brief layout of the room)

Any planning changes, pitfalls during development?

Do you Team Teach?

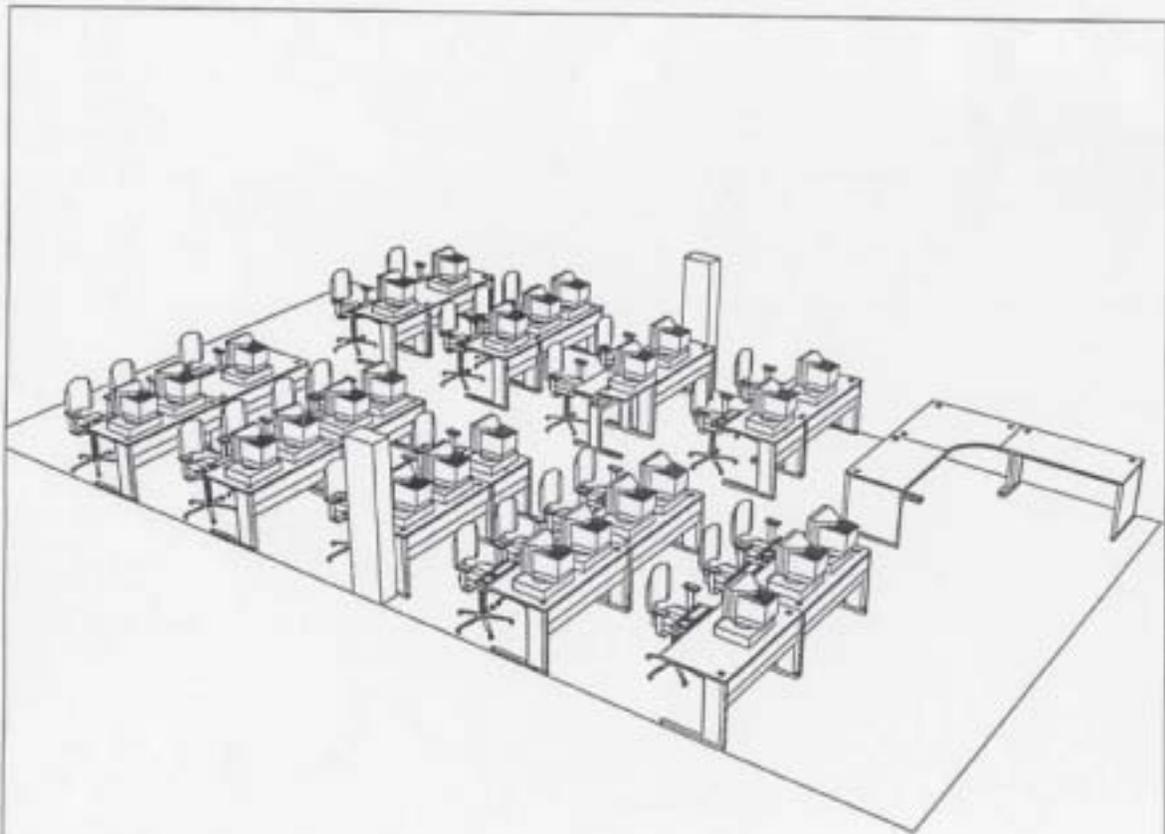
If so, are they both librarians?

How are large classes handled (ex: separated into two groups)?



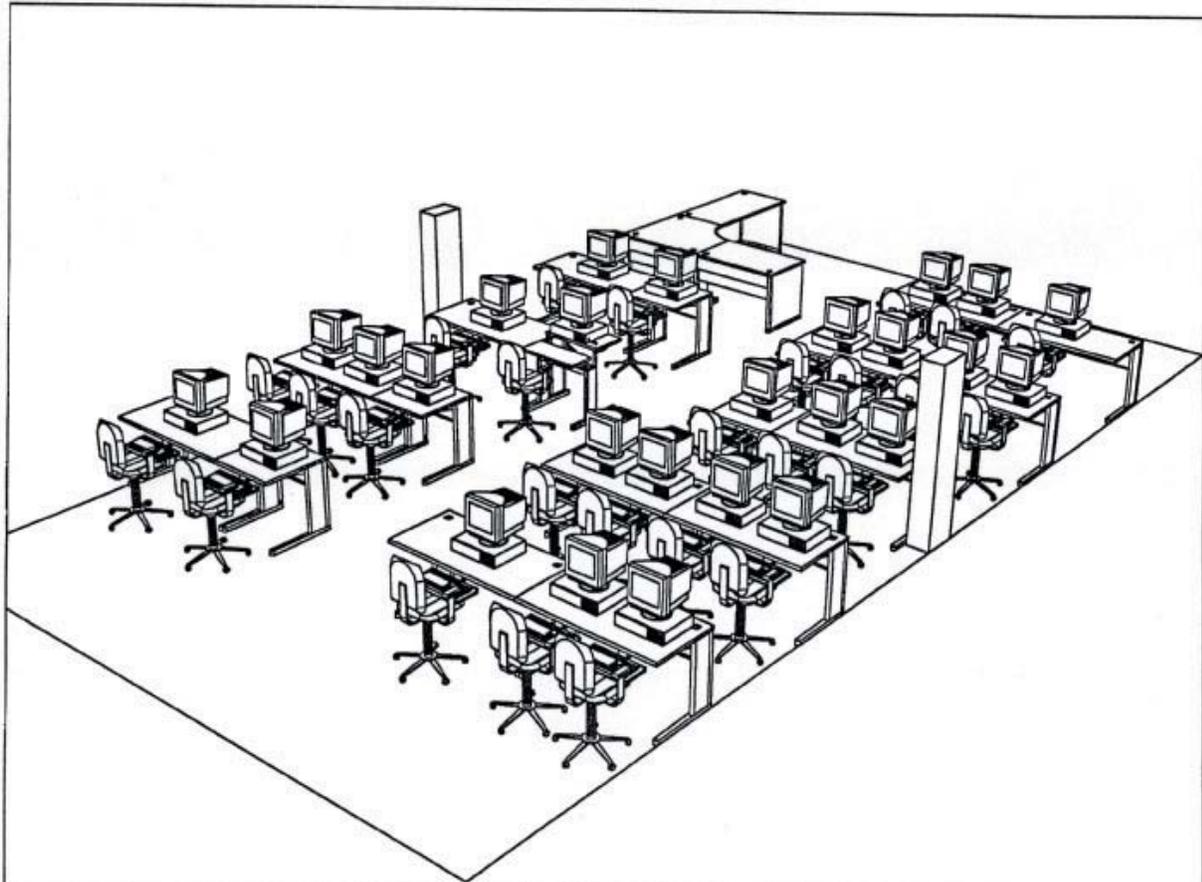
E. XT08E-SM

WRIGHT·LINE Technical environment solutions	Sales Representative: Sara Travis	Prepared for: Texas A&M University - Corpus Christi Electronic Classroom - Library	Product: Line	Drawn by: L.Ward
	South	<small>This proposal and drawing has been prepared for the internal use of the customer named</small>	Date: 03/20/98	Quoted: 087021_01832



E. MICROGRAPHY

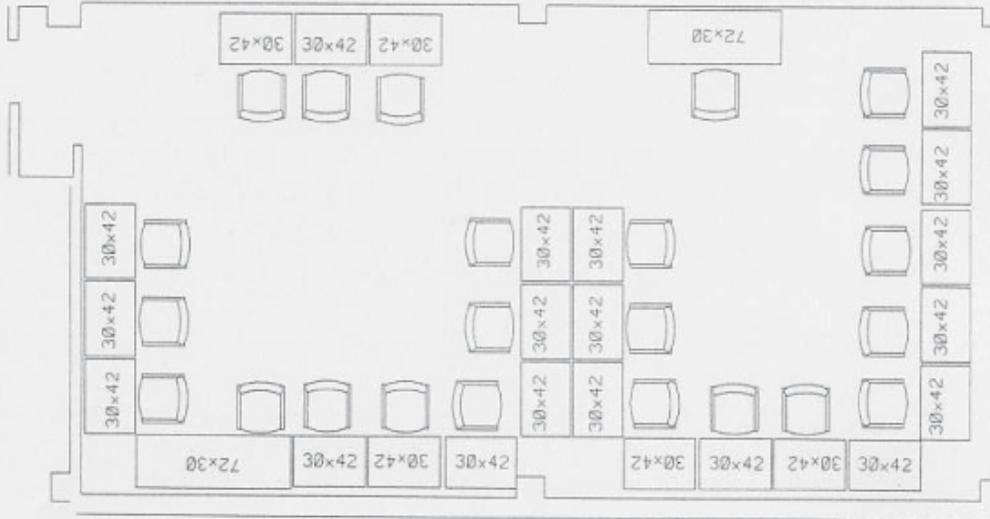
WRIGHT·LINE <small>Technical environment solutions</small>	Sales Representative New Deals	Prepared for: Texas A&M University - Corpus Christi Electronic Classroom - Library	Product: Lite	Drawn by: A.Hart
	South	This proposal and drawing has been prepared for the stated use of the customer named		Date: 01/25/88



APPENDIX 4

WRIGHT•LINE technical environment solutions	Sales Representative: Rene Trevino	Prepared for: Texas A&M University - Corpus Christi Electronic Classroom - Library	Product: Linx	Drawn by: A.Ward
	South	<small>This proposal and drawing has been prepared for the internal use of the customer named</small>		Date: 03/20/98

configuration seats
22 students & 1 teacher



APPENDIX 5

Electronic Classrooms.. Design, use, and evaluation

AMIGOS Fellowship Final Report

Bibliography

- Allen, N. (1996, December). Designing an electronic writing classroom. *IEEE Transactions on Professional Communication*, 3, 232-238.
- Bridges, B. (1996, Spring). The future of classroom design: Integrating technology and instructional methods. *Educational Considerations*, 23, 39- 43.
- Carpenter, S. (1994). Sidebar 5: Hands-on instruction. *Library Hi- Tech*, 4, 3.
- Coffey, J. & Holzberg, C. (1996, October). Tools by topic: Social Studies essentials. *Electronic Learning*, 16, 26-28.
- Dowden, R. & Humphries, S. (1997, May). Using E-mail in computer assisted freshman composition and rhetoric. *The Journal*, 24, 74-75.
- Editorial: Planning an electronic classroom. (1995, Spring). *Research Strategies*, 13, 66-68.
- Janicke, L. (1994). Planning an Electronic Library Classroom: An annotated bibliography. Univeristy of Illinois at Urbana-Champaign. <http://alexia.lis.uiuc.edu/~janicke/Abstracts.html>
- Jonsen, R. W. (1991, January/February). The future of information technology in higher education. *Change*, 42-51.
- Kozman, R. B. & Johnston, J. (1991, January/February). The technological revolution comes to the classroom. *Change*, 10 -23.
- Leidner, D. E. & Jarvenpaa, S. L. (1993, March). The information age confronts education: Case studies on electronic classrooms. *Information Systems Research*, 4, 24-54.
- Lewis, D. C. (1997, Summer). Making sense of academic cyberspace: Case study of an electronic classroom. *College Teaching*, 45, 96-100.
- Lowry, A. K. (1994, Fall). The Information arcade at the university of Iowa. *Cause/Effect*, 17, 38-44.

- Lyman, P. (1991, January/february). The library of the (not-so-distant) future. *Change*, 34-41.
- Maitino, J. R. (1992, Winter). Using student evaluations and other measures of instruction. *The journal of staff, program & organization*, 10, 209-215.
- Scneidermann, B., Alavi, M., Norman, K. & Borkowski, E. (1995 November). Windows of opportunity in electronic classrooms. *Communications of the ACM* 38, 19-24.
- Shotwell, S. (1994, January 1). Design Primer: Part IV: Blueprint for an electronic classroom. *Electronic Learning*, 13, 14-18.
- Vasi, J. & LaGuardia, C. (1994, September/October). Creating a library electronic classroom. *Online*, 75- 84.